

11th International Conference on Damage Assessment of Structures (DAMAS 2015)

This content has been downloaded from IOPscience. Please scroll down to see the full text.

2015 J. Phys.: Conf. Ser. 628 011001

(<http://iopscience.iop.org/1742-6596/628/1/011001>)

View [the table of contents for this issue](#), or go to the [journal homepage](#) for more

Download details:

IP Address: 157.193.240.1

This content was downloaded on 14/07/2015 at 09:36

Please note that [terms and conditions apply](#).

Proceedings of the 11th International Conference on Damage Assessment of Structures, DAMAS 2015, Ghent University, Belgium, 24-26 August 2015

Chairman

Prof. Magd Abdel Wahab,
Ghent University, Belgium

International organisation committee

Prof. Biswajit Basu, Trinity College Dublin, Ireland
Prof. Nao-Aki Noda, Kyushu Institute of Technology, Japan
Prof. Huajiang Ouyang, University of Liverpool, UK

International Scientific Committee

F Aymerich, University of Cagliari, Italy
J Barton, University of Southampton, UK
B Basu, Trinity College Dublin, Ireland
S K Bhalla, Indian Institute of Technology Delhi, India
F Casciati, University of Pavia, Italy
R Ceravolo, Politecnico di Torino, Italy
F Chu, Tsinghua University, China
G De Roeck, KU Leuven, Belgium
L Faravelli, University of Pavia, Italy
S Fassois, Patras University, Greece
M Friswell, University of Swansea, UK
L Garibaldi, Politecnico di Torino, Italy
G-R Gillich, Eftimie Murgu Univ Resita, Romania
J-C Golinval, University of Liege, Belgium
A Gonzalez, University College Dublin, Ireland
K Holford, University of Cardiff, UK
G Manson, University of Sheffield, UK
T McCarthy, University of Wollongong, Australia
N-A Noda, Kyushu Institute of Technology, Japan
K Oda, Oita University, Japan
P Omenzetter, University of Aberdeen, UK
W Ostachowicz, Polish Academy of Science, Poland
H Ouyang, University of Liverpool, UK
B Peeters, LMS International, Belgium
R Pullin, Cardiff University, UK
A Rudawska, Lublin University of Technology, Poland
V Silberschmidt, University of Loughborough, UK
J J Sinou, Ecole Centrale de Lyon, France
W Staszewski, AGH University of Science and Technology, Poland
C Surace, Politecnico di Torino, Italy
K Worden, University of Sheffield, UK
W Zhu, University of Maryland, Baltimore, USA
X Zhu, University of Western Sidney, Australia



Editorial

This volume contains the proceedings of the 11th International Conference on Damage Assessment of Structures (DAMAS) 2015. DAMAS has a long history of almost 20 years. The first DAMAS conference took place in 1995 (Pescara, Italy), followed by a biannual meeting in 1997 (Sheffield, UK), 1999 (Dublin, Ireland), 2001 (Cardiff, UK), 2003 (Southampton, UK), 2005 (Gdansk, Poland), 2007 (Torino, Italy), 2009 (Beijing, China), 2011 (Oxford, UK) and 2013 (Dublin, Ireland). The eleventh edition of DAMAS conference series, DAMAS 2015, is hosted by Ghent University, Belgium, and is held at the congress center Het Pand in Ghent city. Ghent is the capital and the largest city of the East Flanders province of the Flemish region of Belgium. Het Pand is the culture and congress center of Ghent University and is a historical monument.

The conference is established as a major international forum for research topics relevant to damage assessment of engineering structures and systems including numerical simulations, signal processing of sensor measurements and theoretical techniques as well as experimental case studies. The presentations of DAMAS 2015 are divided into 6 main sessions, namely 1) Structural Health and Condition Monitoring, 2) Damage in Civil Engineering, 3) Damage in Machineries, 4) Damage in Composite Materials, 5) Sensing and Sensors and 6) Signal Processing.

The organising committee is grateful to keynote speakers; Professor Guido De Roeck, Head of Structural Mechanics Division, KULeuven, Belgium, for his keynote lecture entitled ‘Structural Health Monitoring: highlights and challenges’, Professor Weidong Zhu, Department of Mechanical Engineering, University of Maryland, USA, for his keynote lecture entitled ‘Vibration-based Structural Damage Detection: Theory and Applications’ and Professor Wieslaw Ostachowicz, Head of the Laboratory of Active Materials and Smart Structures, Polish Academy of Sciences, Poland, for his keynote lecture entitled ‘Damage Assessment and Reliability in Offshore Wind Turbines Technology’.

Special thanks go to members of the Scientific Committee of DAMAS 2015 for reviewing the articles published in this volume and for judging their scientific merits. Based on the comments of reviewers and the scientific merits of the submitted manuscripts, the articles were accepted for publication in the conference proceedings and for presentation at the conference venue. The accepted papers are of a very high scientific quality and contribute to advancement of knowledge in all research topics relevant to DAMAS conference.

The organising committee would like to thank prestigious research groups, who made a great contribution to DAMAS 2015: the group of Professor Lars Damkilde, Aalborg University, Denmark; the group of professor Gilbert-Rainer Gillich, Eftimie Murgu" University of resita, Romania, the group of Professor Wieslaw Ostachowicz, Polish Academy of Sciences, Poland and the group of Dr Vikram Pakrashi, University College Cork, Ireland. Special thanks go to Dr Vikram Pakrashi for organizing the mini-symposium ‘Damage Detection, System Identification and Health Monitoring for Offshore Wind and Wave Energy Devices’.

Finally, the organising committee would like to thank all authors, who have contributed to this volume and presented their research work at DAMAS 2015.

Professor Magd Abdel Wahab
Chairman of DAMAS 2015